WHEN YOU TRAVEL IN GREECE

TAKE ALONG A SLEEPING BAG TO KEEP OUT THE FLEAS.

You Won't Need It in Athens, Which Is Beautiful and Clean and as Modern as It Is Ancient—One of Mrs. Custer's Discoveries There—A Ride to Olympia.

Travel in Greece is full of surprises. There are so many unexpected comforts; not to mention a goodly number of discomforts for which one is equally unprepared. Luckily for the tourist, the comforts may be embraced without too much expense and the discomforts avoided without too much trouble.

For the ordinary tourist Greece is still a country of one Mecca. He paraphrases the Mohammedan and says: "There is but one Greece and Athens is—the whole thing."

Ninety-nine out of a hundred tourists who visit the country plump themselves straight to Athens and then plump themselves straight out again. The hundredth tourist goes to Athens, of course; but he visits Olympia, too—Olympia, whence he returns as proud as a peacock. He has covered the length and breadth of tourist travel in Greece.

When people stay at home, some of them are hungry all the time and all of them are hungry some of the time. But when they go abroad, all of them are hungry all of the time. Hunger is the normal condition of the tourist.

Consequently, it is a matter of importance that one of the comforts which Athens invitingly offers the traveller is a good hotel. There are three good hotels, in fact, gleaming cheerfully at one another from their posts in the principal square of the city. At one of them good rooms (with a view of the Acropolis) and a good table may be enjoyed for $2 a day. One may go to the best hotel for $3 a day. For a stay of longer than a week ask for better rates. You will get them.

English and French are spoken at all of these hotels, as well as at several pensions in the same neighborhood. There is another hotel, said to be excellent, but where one will find no English and little French. There will be more of a foreign flavor, however, and as for the modern Greek which is spoken, one soon finds a substitute in the language of signs.

When people reach Athens they must still have in their mouths the taste of either Italy, Egypt or Turkey, three names which are synonymous for picturesqueness and dirt—especially dirt. With this taste in the mouth one rides to a hotel in Athens through a city of cream-colored stone, as fresh-looking as if it had been built but yesterday, as indeed it was.

There is a swept and garnished look about the place, as if the Woman's Union for Civic Improvement or the Ladies' Municipal League were running the Street Cleaning Department. Still it may be dusty except in the main streets. The writer was in Greece in March and the road between Athens and the Piræus was muffled in three inches of powder.

But there is, nevertheless, a wonderfully vivid impression of cleanness and of fairly crystalline clearness about the country and its atmosphere. One literally breathes again after futile but persistent attempts not to breathe in the stenches of Italy—dear dirty Italy—or of the less beloved but not less dirty Orient.

Arrived at the hotel, the traveller will see from his window a square, less than half as large as Washington Square and in the French style; that is to say, without a blade of grass, but covered with a very fine gravel, not much coarser than sand. At one end of the square a raised terrace leads to the plain façade of the royal palace. A military band plays on the terrace every morning.

Below the hotel window—no matter which hotel window—a squad of little round iron tables, attended by spidery iron chairs, seems about to march boldly across the square. On busy days, in fact, they do encroach further into the open; but on ordinary occasions they stand in a compact square at the edge. Gayly uniformed officers sit on the chairs and gossip for hours across the tables over something which would turn an American black in the face. Somehow these little syrups are too reminiscent of the sugar-and-water days of infancy to appeal to grown-up Americans.

To the average tourist Athens is a surprise because it contains so few tangible remains of its glorious antiquity. "Few!" gasps the archæologist, and splutters in amazement. But the average tourist is not an archæologist. To him the Acropolis is one "sight." To the archæologist every stone upon it is worth being examined and reexamined. When the average tourist has gone up and down the Acropolis, knocked a piece of pink quartz off the rocks of Mars Hill, peeked into the alleged dungeon of Socrates, and stood upon the rostrum of Demosthenes, wondering vaguely who Demosthenes was, he has pretty nearly finished the sights—his sights—in Athens.

Athens is not like Rome, where it seems as if one could not walk the length and the breadth of the city without treading on a stone that has not lain for centuries in that place. The Greek city is like a coat of arms whereon the past is quartered with the present. The two scarcely mingle. The Acropolis side is the dead past. There you will find nothing but ruins lying asleep under a sweet smelling coverlet of wild thyme. The other side of the city is absolutely modern—fine, spick-and-span new buildings, wide streets, a tram car bowling briskly along, plate glass windows through which one sees displayed the manufactures of the world.

Another surprise is the dress of the people. With rare exceptions they would pass unnoticed in the streets of an American town. But the exception is a beauty, with his tasselled cap, his embroidered jacket and waistcoat, his ballet skirts, swathed calves and tiptilted slippers with a big silk pompon upon the very point of the toe.

The writer met Mrs. Gen. Custer in Athens one day, and, with the cheerful curiosity which is permissible in the freemasonry of travel, asked her what she was doing over there.

"Seeing things and getting together a few important facts," she replied.

"The new discoveries? The condition of the walls of the Parthenon? The excavations——"

"Dear me, no!" exclaimed Mrs. Custer. "I said 'important' facts. What are excavations to the number of yards in the flounce of that six-footer's white petticoat."

"And do you know the number?"

"Certainly. Twenty-two yards exactly. Yes," consulting a notebook, "twenty-two yards."

There is yet another surprise waiting for the blasé traveller, the man who has been disillusioned so often that he knows what to expect. The Parthenon by moonlight? Pooh, pooh! He knows how these seven wonders of travel flat out into insignificance when you see them. But that night he steps softly among the broken columns and speaks reverently as if he were in a holy place. It is almost too good to be true, but the Parthenon by moonlight, or rather the Acropolis by moonlight, is all that the most credulous traveller has dreamed that it would be.

Encouraged by the ease and comfort of the tourist's lot in Athens, the traveller may conceive the wild idea of going further into this country, where great names are almost as thick as milestones. Let him be warned in time. Athens is one thing, Greece is a mighty different thing.

Probably a man would not starve anywhere in Greece. There are good cooks now, even if they have fallen off somewhat in the Olympic games. But if the traveller is safe from starvation so is another inhabitant of Greece. Ah, how doth the little busy imp of an insect improve each shining hour! When the writer was in Athens the American professors—there are always half a dozen of them studying there—were preparing for their summer exploring tour into the country and their wives could be heard consulting in this wise:

"Wouldn't you like the pattern of my sleeping bag? Professor Blank and I have evolved this after a dood deal of experimenting, and we think it is just as near perfect as we can make it."

"Is the hood separate?"

"Not entirely. It's buttoned down in front, but is solid in the back. You know they creep in between the buttons if you have it detached in the back."

"Yes," with feeling, "I know. You have holes for the eyes and nose and mouth, of course."

"Well, just for the eyes and the nose. That's sufficient."

And so on. Sleep in the houses in the country would be impossible to a foreigner without these sleeping bags.

But, if one can judge from the revelations of the railway trip from Athens to Olympia, the Greeks can cook anything.

The train leaves Athens at about 7 A. M. and reaches Olympia at about 8 in the evening. There is one stop at an eating station along in the morning. By the way, Corinth is that station and one has a confused undercurrent of thoughts about Paul, about Greek wars and oracles dwelling in fountains, while one eats unnamable things and listens for the guard's horn.

That is the last stop for a meal. But at several places dark-eyed boys patrol the step which runs along the train, offering smoking hot morsels of meat, through which a smooth pointed stick has been thrust as we impale taffy. The meat is delicious. There are about two bites in each piece and five pieces on a stick. As for the cost of these marvels, the breakfast at Corinth, which included fish, cost about 15 cents; the stick of hot meat, a hard boiled egg and some bread cost about five cents.

The railway carriages are of the compartment pattern which is universal abroad and, though they are not up to the best in the more frequented countries, they are comfortable. The guards are polite and attentive, though perfectly unintelligible. The country is always interesting and sometimes beautiful with a sort of glorious freshness which seems inconsistent with the facts.

Perhaps there is sometimes a reminiscent dreaminess in the air, but it was not there when the writer was. Olympia, which should have been drowned in the shades of antiquity, was inexpressibly crisp and clear and fresh. The ruins were there, to be sure, every crevice stuffed with wonderful memories. But earth, air and sky seemed as if man had never touched, breathed or looked upon them.

The traveller will carry away from Olympia four powerful impressions. The first is that of the Hermes, perhaps the most beautiful of the surviving wonders of Greek sculpture; the second is the Victory, with back-blown garments and the dreadful blank where the face once was. A peasant found the head when he was building a hut of stone, he mortared it in with the ordinary stones and then, with a hammer, knocked off the features so that his wall should be smooth! The third of these impressions will be that made by the ruins which, next to the Acropolis, bring him nearer to a realization of what Greece once was. And the fourth will be the conviction that the coldest bare floors, the narrowest little beds and the thinnest mattresses in the world are those in the hotel at Olympia.

REFORM OF A TOUGH TOWN

A Town Marshal No Longer Needed in Once Notorious Dodge City.

DODGE CITY, Kan., Sept. 12.—The City Council of Dodge City has stopped the pay of its town marshal and the man who has been holding down that sinecure has resigned. He will have no successor, because no necessity exists for one.

This news will sound strange to those who remember the days when the town was described as the hottest outside of Hades, upon whose westernmost boundary people used to say it was situated. In those days the marshal of Dodge had to be cool, nervy and resourceful and able to draw a pistol quicker and shoot straighter than any other man of the many who walked the streets with six-shooters stuck in their belts and chips on their shoulders. Those were the days when Wyatt Earp and Bat Masterson and Chalk Beeson and Clay Allison and Tom Nixon were proud to wear the title of town marshal of Dodge.

Of the more famous men who once held the office, but three are known to be living. Earp was last heard of in Alaska, Masterson not long ago figured in a queer encounter in New York city and Beeson lives here. Beeson is, in fact, the only living ex-marshal who has stuck to the town.

One other landmark of the old days remains, Boot Hill. This is the old town cemetery, started by Bat Masterson with the bodies of a gang of Mexicans who dropped in from the south for the purpose of shooting up the town and dictating its policy for a few short hours. They lasted about half an hour and were buried with their boots on. This gave the cemetery its name and no one lies within its confines who took the trouble to die naturally and in bed.

Beeson has his home in Dodge, but rides the range on his own ranch and farm close to town. He lacked the foolhardy daring of Masterson and the resentfulness of Earp, but no man was quicker on the draw and nobody could shoot straighter than he. For years he was a marked man, but he no longer ever wears a gun, and this is typical of the changed atmosphere of the town.

It was Beeson whose bluff frankness won the heart of Gen. Sheridan when he had the Grand Duke Alexis here on a buffalo hunt. The Grand Duke, in the excitement of the chase, handled his gun a little carelessly and the marshal swore at him roundly for it.

In the old days every other house in Dodge was a gambling den and those in between were dance halls. Nowadays there are more churches than saloons and no gambling houses at all. Twenty years ago it was a familiar saying that "there are no churches as far west as Dodge and no God west of Garden City."

CHARACTER AND THE RAZOR.

Good Qualities of the Man Who Can Shave Himself on a Train.

According to a Pullman car conductor the average man who travels for three, four or five days on a train prefers to go unshaven rather than shave himself while en route.

"I've been travelling for five years," he said "between Chicago and Frisco and I calculate that about one man in ten shaves on the trip. I always like to carry men who shave themselves every morning. I find that kind of man wants the best and is willing to pay for it. Besides he's the best tempered kind of man.

"A man who can't control his temper never shaves on the cars, not more than once. He isn't a drinking man either, for it requires a steady hand to shave on the cars and be all there at the finish.

"And you can tell a beginner first glance. The regulars always ask questions about the road ahead and if they're near a station. If there's a station a few miles away they'll wait, unless the road is straight, or there's a crowded car.

"It is not an easy job to shave when you strike a curve every fifteen seconds, but the regulars, they just stand with their feet apart and one side braced against the washstand. They don't cut themselves, either and I scarcely see any of 'em use a safety, just the old fashioned razor, same as I use myself.

"I notice that the man who shaves himself knows his way about and takes things just as they come. He doesn't get excited when there is no cause. He eats regularly and he sleeps the same and he doesn't want to go to bed too early or get up too late. He's reasonable.

"If he's married he talks to his wife and if he is not married he does not go flirtin' with strange women. He doesn't kick at canned goods, for he knows he can't get any other kind, and the waiters like to wait on him for he does not think he's the only passenger on the train or try to make himself think the waiters are stuck on living on their wages and have a dislike to tips.

"He's all right, is the man who shaves himself. He never kicks at the scenery. I always look out for his baggage and he always looks out for me. I wish every man shaved himself on the cars, I do."

THE HUNTING OF M. LOUBET.

VACATION PASTIMES OF THE PRESIDENT OF FRANCE.

He Is as Enthusiastic a Sportsman as Mr. Roosevelt, but Hunts Smaller Game—Simple Adventures in the Forest—The State Hunts at Marly.

President Loubet of France, like President Roosevelt, is an enthusiastic hunter, but there is a great difference in the hunting of the two men owing to the dissimilar nature of the two countries. By the side of the big game exploits of President Roosevelt, "Papa Emile," as the French President is familiarly called, has the air of a small boy throwing stones at garden sparrows from a catapult.

He has not at his disposal the vast spaces teeming with superb wild life that Mr. Roosevelt made his own in his early days. But in his way M. Loubet is just as enthusiastic a slayer.

From early August till midwinter President Loubet rests from State ceremony and State work and foots it daily over miles of forest and plain, dealing destruction to the game of all kinds in which the State preserves are rich. At this moment his gun is certainly cracking persistently at Rambouillet or Marly, once the demesnes of the King of France, now the happy hunting grounds of the democratic Presidents of the Third Republic.

Both are within thirty miles of Paris, so that M. Loubet is within easy reach of Elysée. As a matter of fact he does run up to Paris every now and then on a surprise visit and he keeps the telephone wires hot with summonses to Ministers and administrators to present reports and give him the news of the day.

But for the most part he is buried these days in the heart of the forests. Rifle in hand, pipe in mouth, wearing an old blue velvet coat, with his stout yellow gaiters drawn tight over the solid, square-toed, heavily nailed shoes, a dilapidated, easy-fitting soft hat thrown in picturesque disorder on his head, he looks more like a benevolent poacher than a President bound normally by a rigid protocol. When he leaves Paris he slips off his Presidency and becomes again the peasant of Montelimar.

At first these simple ways displeased the people of France. They had disliked President Faure for his haughty manner, for the stiff splendor and state with which he loved to surround himself, "going to bed," as the Parisians said, "to the sound of trumpets." But the change was too sudden. Loubet was blamed for affected simplicity where Faure had been ridiculed for pomp and parade.

After two years and a half the "peasant of Montelimar" has become "Papa Loubet," and the smiling, white-haired old gentleman has found his way personally right to the hearts of the people. Even in Paris, where the mass is distinctly anti-ministerial, Loubet is always welcomed enthusiastically; in the country he is adored.

For miles round Rambouillet the people never tire of telling stories about his good-natured familiarity. In one cottage he has often invited himself to take a cup of milk and a rest while he reads the mail he has brought in the outer pocket of his shooting bag.

At another he has frequently deposited a hare, a rabbit or a pheasant by way of a treat for the sick wife. In a third they will tell you that he has taken particular notice of a little Emile, whom he gravely recommends not on any account to be President of the Republic when he is a man.

"And he laughs," the good woman says in describing the incident. "How the President laughs when my little Emile promises faithfully not to think of such a thing!"

A favorite story at Rambouillet tells how the President was one day shooting close to the château when he noticed that he was being tracked by an unkempt-looking individual, who kept by his side some dozen yards or so within the shadow of the wood.

"What are you doing there?" he called, sternly.

The man stumbled stupidly forward and held out a big bag. Then, addressing the President with the familiar "thou" which the working folk employ among themselves and which is not otherwise used except between close friends, he said:

"I have brought thee some apples, my President."

"Thou art very kind," said M. Loubet, humoring the man's familiarity. "How shall I thank thee?"

"Thou shalt give me a pheasant," was the answer, unexpectedly practical, to the question.

Loubet laughed loud, took the apples and gave a pheasant, "the dearest apples I ever bought in my life," said the President as he handed the bag to his gilly.

The man turned out to be a woodcutter who, not possessing a sick wife or child, knew no other way of gratifying a rather undemocratic longing to add a President's pheasant to his pot-au-feu.

There does not seem any possibility of personal danger to the President from the people of Rambouillet, though Mme. Loubet is notoriously timorous on the subject. The only discordant note the writer heard of during a cycling expedition in the neighborhood was reported by a local gendarme. This functionary was immeasurably shocked by overhearing a young man in a wine shop dismissing M. Loubet's title to respect in a phrase for whose contemptuous force idiomatic English has no equivalent.

"On appelle ça un President, le vieux farceur!": "Call that a President, that old joker!"

It was not very terrible after all, this vinous outburst; only a lingering echo of the old reproach about M. Loubet's excessive simplicity, but the assembled drinkers promptly avenged the insult on the sportsman of Rambouillet by flinging the critic out of the door.

The offending youth would be happier, probably, if fate had cast his lot at Marly. Here he would not be shocked by the sight of a President shooting in an old blue coat. At Marly M. Loubet has to be on his good behavior and play a part.

For it is in these classic, kingly woods that take place the State shooting parties. Just as the President must never appear on the streets of Paris except in quasi-royal state, so he is strictly bound to hold at fixed intervals solemn official battues which the official world attends by right and not by invitation.

There is the shooting party for the Senate, the shooting party for the Ministers, the shooting party for the deputies and heaven knows how many others. They are State functions, controlled by a rigorous etiquette, arranged by a protocol as rigid as that which attends the reception of a reigning sovereign.

The guests are formed into a long firing line with the President in the centre; every gunner occupies, relatively to the President, the exact spot to which his office or his rank entitles him. Commandant Lamy, who fills the ancient court office of Grand Veneur (High Hunting Master), is there to see that the precedent is observed precisely; jokers say he would be shocked if a simple deputy, for example, got one place nearer to the President than a deputy who had been Minister.

Behind the firing line is the serving line, to every guest a gilly with a second gun. The double file advance in rigid order in an immense cleared space in front of the coverts, a bugle blast is blown; the beaters send the game flying to their death; the President fires first; in one second all the guns join in; and then it is every man blaze away as hard as he can, snatching a fresh gun from the man behind after each shot.

The havoc is frightful. The birds are put into a common bag and divided up afterward—so many to the President, so many to the guests, according to their rank; so many to various local officials, Mayors, sub-prefects and so forth; the rest to various hospitals and benevolent institutions depending on the State; always, by the way, a big bag for the hospital of Montelimar.

It is said that the President had quite a squabble with Commandant Lamy over this last bag. Montelimar had no existence in the ancient protocol deciding such matters; but M. Loubet held firm, and the sick of his native village eat of the State game in season. It was a kind of revolution.

"It is magnificent, but it is not sport," one may suppose that M. Loubet says to himself, for it is known that he dislikes the whole business, unlike President Faure, who beamed with joy on these occasions and showed plainly that he felt himself, when centre of the Marly firing line, a worthy successor of the long line of Kings of France who had shot thus in state before him.

President Loubet has ample reason for his dislike of these solemn massacres, even apart from the stiff ceremony which attends them. The birds are practically tame; a host of keepers tend them all the year round; they are protected from the severity of the winter; they are fed on ants' eggs to make them the more worthy and the fatter for the glorious death that awaits them.

The President revolts at this refinement of cruelty; he would rather take his chance shot at a chance bird in good fighting, or flying, condition. He is a very fine marksman, by the way, rarely missing.

At home he talks freely, boisterously even, according to general rumor, but out of doors he seems to resume the taciturnity of the peasants. He likes, however, to be talked to as he trudges along and is supposed for this reason to take especial pleasure in the company of Col. de Lastours, commander of the garrison of Rambouillet, who is one of the liveliest conservationalists a man would hear in a lifetime.

He is very thick also with M. Gautherin, the Mayor of Rambouillet, a lawyer of the old school, who is often invited to dine without ceremony at the château whose dry eighteenth century humor keeps the president beaming with pleasure.

These homely dinners at Rambouillet are the joy of Mme. Loubet's heart; except for them she would scarcely know her husband at all. At the Elysée he is occupied nearly all day with state affairs or with functions that take him away from home; in the evening the dinner is nearly always as solemn as a coronation.

It is at Rambouillet that *La Presidente* enjoys her husband's society as if he were a simple citizen. Not any more closely than that, it is true, for if the ordinary citizen has his office to go to for the day the President is just as irresistibly drawn out of doors in the daylight hours, but like a faithful husband he comes home to dinner—and Mme. Loubet, to use the rather pathetic words currently attributed to her, "gets young again." They are good specimens of the Darby and Joan order of beings, the President and *la Presidente*; and the informal evening meal at Rambouillet, with one or two intimate old friends as the only guests, is a relief to the wife's heart.

OIL AS FUEL ON STEAMSHIPS.

Lieut. Winchell's Report on the Trial of the Steamer Mariposa.

WASHINGTON, Sept. 13.—The Navy Department has made public the report of Lieut. Ward Winchell, U. S. N., the expert detailed by the Department to investigate and report upon the efficiency and installation of the oil fuel system as fitted to the Oceanic Steamship Company's steamer Mariposa. The report contains information of great value to the shipping and naval world.

The gross displacement of the Mariposa is 3,160 tons. The average horse power developed was about 2,481. The average distance made each day by the ship was 354 knots, giving a mean speed of 13.53 knots an hour. There were consumed each day about 278 barrels of oil, which gave an average consumption of 3,720 pounds per hour. It practically required 1½ pounds of oil per hour to secure a horse power, and, while this result has been secured on shore in highly efficient engines, the consumption is practically 50 per cent. less in weight of combustible than would be required of coal. The ship required 262 hours to make the voyage from San Francisco to Tahiti, while only 260 hours was required to make the return trip.

By the use of oil as a fuel the complement of the ship was reduced from 81 to 55, thus decreasing the force in the engine room from 36 to 20 men. The crude oil was atomized by means of an air compressor, which had a capacity of a thousand cubic feet of air per minute compressed to 30 pounds. The Mariposa has 18 furnaces in her boilers, only 12 of which were used. Two burners were installed in each furnace, although all the burners were not in use except at short intervals when the engines were run at full power.

The engineer experts at the Navy Department are most interested in the fact that careful inspection does not show any effect of the flame on any part of the boilers. Upon reaching Tahiti, after the run, the tubes were swept by scrapers, and all the refuse collected barely filled two ash buckets and some of this came from the coal which had been used on one of the preliminary trials.

The speed secured on the return trip was much higher than that attained on the trip to Tahiti, due to the fact that the firemen became better accustomed to manipulating the burners. The company had taken the precaution to arrange the burners so that steam could be used as the atomizing agent in case the compressor became impaired. On one or two instances during the voyage the compressor did need overhauling, and the oil was sprayed by steam while these repairs were being made.

In discussing the class of men that should be employed in the firerooms, Lieut. Winchell says the work requires neither physical endurance nor previous training with coal fires. The men placed in charge of the contrivance, however, should have mechanical aptitude and possess readiness of resource and nerve.

ARCTIC COAL.

Starting the Mining Industry Amid Spitzbergen Ice and Snow.

The Norwegians are turning their attention to the large and promising coal fields on the southwest coast of Spitzbergen. For several years past their fishermen, while in these coastal waters, have observed the outcrops of coal. Their stories aroused interest at home and the coal fields were examined as a possible source of profit. Several companies have been formed to carry on coal mining in these new fields and there is much confidence in Norway that the new Arctic enterprise will be profitable.

Consul Nelson writes from Bergen that the coal of Spitzbergen is finely adapted for the manufacture of gas. The fuel burns with a high flame and is extremely combustible. Although Spitzbergen is in the Arctic regions, coal may be mined there to considerable advantage. In the first place it has been found that no large capital is required to start the work, as is the case in civilized countries. There is no costly ground to buy, no difficult foundations to build in the way of shafts, and as the land is not inhabited there are no property considerations to interfere. Transportation from the mines to the ships will be inexpensive, the situation of the mines favoring the towage by rope of railroad cars loaded at the mines.

Considerable work has already been done. The mining engineers on the ground give their opinion that the cost of the coal will not exceed $2.40 per ton. They say that with a force of sixty workmen, 25,000 tons may be taken out annually. The coal can be transported only in the summer, but the works may be kept going the year round.

In Sweden some of the best steel-making iron ores are being mined in large quantities, many miles north of the Arctic circle. The only railroad now existing in the Arctic regions carries the ore from these far northern mines to the Baltic; another Scandinavian Arctic enterprise that will give a busy aspect to the southern shores of the Spitzbergen Archipelago is likely soon to be well developed and as propsperous as iron mining in Arctic Sweden.

WHERE OUR ENGINES EXCEL.

REASONS WHY AMERICAN LOCOMOTIVES GO ABROAD.

Their Superiority in Tractive Power as Marked To-day as It Was Sixty-four Years Ago at a Memorable Test—Railroad Needs Here and in England.

The recent report of the Census Bureau on locomotives, which showed that in 1900 525 American-built machines were sold in foreign countries, as against 161 in 1890, seems to indicate that they are increasing in popularity in other countries. But the truth lies the other way, in a measure, at least.

They may like our locomotives better than any other in Mexico, in South America, in Japan and possibly in Russia, but they don't in England or Germany or France. In every one of these countries the engine drivers complain that American machines are wasteful of fuel, that it takes an inordinate lot of oil to keep their joints lubricated, that the workmanship on them is defective, thus necessitating unusual and excessive repair expenses, and so on.

Not all of these complaints are well founded by any means, being prompted in some instances by sheer animosity against American machines; but the fact remains that while American locomotives average up to the best, there are points probably in which they are excelled by foreign machines, especially for use on foreign lines.

There is no doubt, for instance, that English locomotives are more carefully finished, and that often they can do the work required on an English railroad with less fuel consumption than the American machines.

Why, then, do the foreign railroads buy engines of American make? Because they are forced to do so or to get along without new locomotives for months and months after they are demanded by the traffic necessities of the roads. For American locomotive makers, like American bridge builders, have a habit of hustling at their work, and, owing to certain manufacturing methods not practised abroad, can turn out more work in less time than the locomotive makers of any other country on earth. Besides, "the price is right."

Notwithstanding all the foreign criticisms of our railroads the American railroad system is by long odds the most efficient in the world. Its method of handling passengers is more economical, it has more fast trains and its passengers travel more comfortably. Only the most prejudiced of Englishmen or Germans or Frenchmen deny that.

But our freight carrying methods are immeasurably superior to those of the foreign roads. There isn't a railroad of any consequence in the United States to-day that could operate its freight department on the basis of freight operation abroad without running great danger of falling into a receivership, since the cost per ton mile on any good American line is only a fraction of the ton mile cost on the best of the foreign lines. This, despite the fact that our roads show grades and curves that would be impossible of operation with railroad equipment that is considered quite adequate abroad.

We use heavier engines and bigger freight cars than anybody else. In the 50's our freight cars were eight wheelers and the capacity of the cars was figured at a ton to the wheel, or eight tons each.

Gradually the capacity of cars has increased till it averages nearly four times as much. Five years ago thirty tons was generally counted as a carload. Now most of the new cars carry forty tons each.

The big new steel cars will carry fifty tons a piece. When the eight-ton cars were in use fourteen cars were a load. The massive new freight locomotive of today will haul seventy-five of the new steel cars, loaded, on the dead level, or sixty over the grades and curves of such a trunk line as the New York Central or Pennsylvania.

American locomotives are the most economical in the world for hauling such trains. Hauling the short light trains of goods wagons used on English roads it it is quite likely they are wasteful.

So far as efficiency under difficult and varying conditions goes, the American locomotive is far and away the best machine. This was shown away back in 1838, sixty-four years ago, when the first Yankee engine was imported into England.

The Birmingham and Lancaster Railway was completed in that year. There was one stretch of road on the line that for economy's sake had a gradient of one in thirty-seven, or nearly 144 feet to the mile, and it was freely predicted by the English that no locomotive could be built that could haul a train of loaded goods wagons up such a line.

Brunel, then the greatest engine builder in the United Kingdom, admitted his fear that the prediction was correct. The civil engineer who had laid out the line, one Capt. Morrison, was severely criticised for introducing the grade, and he began to be afraid that the road would be a failure, especially as the two Stephensons, one of whom had built the first practical locomotive, agreed with Brunel.

But Morrison had not ventured on so steep a grade without some justification. Before laying out the line he had heard that even steeper grades were in existence on American railroads, and that American engines were successfully operated over them.

So, without advertising his action to the world, he sent to Philadelphia many months in advance of the road's opening and ordered an engine from a concern which has since become the most famous engine-building establishment in the world. He was so fearful that the engine would not reach England in time for the opening, it is said, that he purposely delayed the work a little.

The American builders were as prompt then as now, however, and the machine was landed on British soil quite early enough to suit Capt. Morrison's purpose.

Railroad openings were a great novelty in those days, and this one was witnessed by a great crowd. Naturally the interest centered on the Lickey incline, as the stretch of heavy grade was termed.

When Capt. Morrison brought out his Yankee engine, saying he had a machine that he was sure could haul an ordinary goods train up the incline, there was amazement all round. The engine differed in many obvious ways from the English ones.

It had two pairs of driving wheels coupled together, which looked very odd in British eyes, used to locomotives with only one pair of drivers. Besides, the Yankee engine lacked in finish. In fact, it was so roughly built that the crowd jeered openly and the chronicles of the day relate that Capt. Morrison was made visibly nervous by the hostile demonstration.

He sent the engine to its work, though, coupling it to several goods wagons, holding thirty-four long tons in the aggregate. As the ungainly machine rolled along a level stretch of track before taking the grade the jeers of the crowd grew into a loud chorus of disapproval.

This was moderated somewhat as the machine began to climb, but predictions that she would soon become stalled were freely made. They were soon silenced though, for in less than eleven minutes the engine had mounted the incline at an average speed of 14½ miles an hour.

This changed the jeers into a storm of applause from the throng at the top of the grade and Capt. Morrison's nervousness was succeeded by a corresponding degree of elation. Contrariwise, the British locomotive builders were beside themselves with chagrin, and Burry, whose standard as a builder was second only to Brunel's, declared that English engines could at least duplicate the exploit of the American machine.

An engine of the newest and best type was accordingly brought from Liverpool and started empty up the grade. There was no jeering at the start; for the crowd, as well as Burry and Brunel, wanted to see a demonstration of British supremacy.

Bravely the engine set out to duplicate the previous performance, the drivers moving merrily round and round, keeping time to the rapid exhaust. When the grade was struck the machine began to move slower and more slowly.

Presently the single pair of drivers began to slip, while the exhaust was quickened into a nervous succession of snorts. Then, before half the grade had been overcome, the machine came to a full stop and all hands had to acknowledge that the despised Yankee engine had done better than the best obtainable machine of British make. Then there was jeering a-plenty and the crowd dispersed much disheartened at the result.

The chief point in favor of the American locomotive on that occasion lay in its coupled driving wheels. American builders had learned early that engines with two pairs of driving wheels coupled could haul bigger loads and could climb steeper grades than engines with only one pair of drivers. That was because two sets of drivers afforded two bites on each rail, whereas one pair had only one bite, or just half as much tractive power.

It took the English railroad men many years to grasp this simple theory, albeit it was simply backed up by experience and fully demonstrated in England on that memorable day sixty-four years ago.

Indeed, English engines furnished with only one pair of drivers are often to be seen to this day, and it was not till a few years ago, comparatively, that coupled drivers were seen in any numbers on British roads.

It should be explained, however, that with relatively light trains a single pair of drivers is as efficient on the best English roads as double drivers coupled are on the average American line. This is because the English lines were from the beginning much better and more expensively built than American ones.

The early English railway builders spent thousands of pounds on fills and cuts to avoid grades and curves that the early American builders would have cared nothing about. Thus the American and English types of locomotives, practically identical at the start, diverged rapidly, being furthest apart some twenty or thirty years ago.

To-day they are much closer, for many of the new and heavy British locomotives have at least two pairs of drivers coupled, while a few have three. The American heavy freight engine of the latest type almost invariably has four pairs, but the English have not yet gone that far.

Notwithstanding the now generally acknowledged superior tractive power of the engine with coupled drivers, American engines are occasionally to be seen with only one pair of drivers. One of the famous fast trains between Philadelphia and Atlantic City, for instance, is hauled regularly by such an engine without trouble, since the road is virtually without grades or curves.

The coupling of the drivers was not the only point in favor of the Yankee engine away back in 1838. Its drivers were so placed as to bear the greater part of the machine's weight, thus holding down the machine to its work, while the drivers of the competing English machines bore little more than a third of its weight.

Ten or fifteen years later the Hudson River Railroad authorities, being anxious to increase the speed of their passenger trains to match English railroad speeds, which then led the world, threw all practical American railroading experience to the winds. They built a number of locomotives possessing all the defects of the English type and none of its excellences.

First of all, they fitted each engine with single pair drivers, eight feet in diameter, quite as large as the drivers of the fleetest steam monsters of to-day. These experimental engines ran like greased lightning when not loaded, and the trial of the first one, light, roused the most extravagant hopes for mile-a-minute trains. With a load, however, the new type engine could not compete with the regulation American type mounted on coupled drivers only four feet in diameter.

For some time all hands in the Hudson River Railroad management were puzzled mightily, but after a while an engine driver told them wherein their mistake lay. Besides adopting the single pair driver type, the axle of the drivers was set back of the boiler, so as to bear only a small fraction of the machine's total weight.

It rested mainly on the forward trucks, and thus the drivers bore no weight to speak of, and naturally they slipped as soon as they were called upon to haul a load. Of course, the new machines had to be rebuilt before they could be put into active service.

Not only are the locomotive builders of the world approaching one another as to types of engines—though still wide apart in many things—but railroad managers the world over are coming closer together in their general practice.

Thus while the block signal system was an accomplished success abroad long before it was introduced here, the block systems on our great lines are now the best in the world, and an automatic American system is actually being introduced on one of the big English roads.

So it is with regard to roadbeds. Originally the American roadbeds were incomparably inferior to the English and European roadbeds, but the roadbeds of some of the best American lines are now the finest in existence, and the work of improving them has hardly begun, though since 1897 nearly or quite a billion of dollars has been so laid out.

This year the combined expenditures in improving American roadways—cutting down grades, straightening curves and laying heavier rails and abolishing grade crossings—will amount literally to hundreds of millions, perhaps half a billion, a sum quite vast enough to bankrupt a score of the most important Old World lines.

IT'S CUBA FOR THE CUBANS.

Veterans Demand the Removal of All Spaniards From Public Office.

HAVANA, Sept. 9.—There is a strong movement here to secure the removal of all Spaniards from any part in the government of the island. A commission of former Cuban soldiers recently visited the President to request the immediate dismissal from office of all Spaniards and Cubans who served with the Spaniards.

The soldiers said that there were in the Government employ many persons of the character described and they said that this was a great injustice to those who had fought all through the war and were now on the point of starvation. They threatened to call a mass meeting to support their demand. The President asked them to abstain from such a demonstration until he could make an investigation.

This investigation the President placed in the hands of Secretary Tamayo. It resulted in a report favoring the petition of the soldiers. Dr. Tamayo says that Spaniards who fought against the Cuban insurgents and Cubans who fought against their own countrymen are at the present time occupying offices under the Government and he will recommend their discharge.

It is believed generally that this movement grows out of the hatred the average Cuban has for the Spaniard and his desire to keep him out of desirable employment. This spirit can be seen everywhere and it applies to most foreigners.

Only to-day an English police captain, who had served on the force since its organization by Chief McCullagh without a reprimand, was forced to resign, although he had fought through the entire Cuban war and personally armed a large number of Cubans and lost a fortune in the Cuban cause. The same spirit is shown toward day laborers as well as officeholders, and a few days ago some Spaniards who sought work on some public works were almost mobbed.

This attitude on the part of the Cubans will cause much confusion in some of the departments, as it will mean the discharge of old and tried men whose places it will be hard to fill. This will be especially true of the Secret Service Bureau.

The men in this bureau were selected by Major Pitcher, U. S. A., Major Caziarc, U. S. A., and Capt. Foltz, U. S. A. The three American army officers tested the men thoroughly and found that they could not be replaced.

NEW STRATEGIC RAILROADS.

SOME NEW RAILROADS OF GREAT MILITARY IMPORTANCE.

The New Russian Railroads and Their Military Value—The Strategic Importance of the Railroads of the Alps.

For no country is the construction of new railway lines or the extension of communications of such military importance as for Russia. The completion of the Eastern China road and of the South Manchurian branch to Port Arthur, at least in their most important features, and their connection with the great Trans-Siberian Railroad, mark an important epoch in Russian railway construction. The importance of this new line is due almost exclusively to its military value; by its means the Russian forces can now be gathered from the remotest regions of the empire and the armies concentrated in a few weeks on the Pacific Ocean, ready to be shipped from Vladivostok or Port Arthur to the Far East; by its means Russia can keep up her watch on the frontiers of China, and after Manchuria is evacuated she can concentrate all the troops required to guard her political interests.

The line from Orenbourg, north of the Caspian Sea, to Tashkend in southern Turkestan, although still far from the Trans-Siberian, is to connect with the latter at Samara, west of Orenbourg, and stands in close relation to the latter route. Of course, one of the first objects is to complete the lines along the frontier of Afghanistan and to connect the Central Asia line (the old Trans-Caspian route) to the new section running to Tashkend; then, when the line which is being constructed in Persia over Dshulfa, Tabreez (in northwestern Persia), Teheran, Meshed (in northeastern Persia) and Kushk is completed, the Russians can readily penetrate into Afghanistan with their gigantic armies.

The Russians now have two army corps facing Afghanistan, about 45,000 men, comprising forty battalions, forty-eight squadrons and seventeen batteries, and their most advanced outpost is near Kushk; but in the event of war it would be very difficult to concentrate the troops or to supply reënforcements from the mother country. There is at present but a single direct line of communications between the headquarters of the two army corps (Askabad and Tashkend), and the most remote garrisons (Kakan and Andishan) would have to send most of their personnel and material by way of the very long, difficult and dangerous route along the Caspian Sea. The great military importance of the Orenbourg-Tashkend line is thus apparent; for, in connection with the Persian line above mentioned, Russia can bring rapidly from Tiflis and the Volga a reënforcement of 54 battalions, 84 squadrons and 23 field batteries, thus giving a total of 100,000 men for the invasion of Afghanistan.

The strategic railways of the Alps have also acquired a great importance in recent years. The French press is still exercised over the new German fortifications near Basel and Mullheim, designed to insure the protection of Germany in the event of a French invasion in that region, and, although not directly connected with these fortifications, the Alpine lines must play an important part not only in a war between Germany and France on the frontiers of Switzerland and Italy, but also in any great European war.

The Alps have often been crossed by armies, and the roads built by Napoleon are still in use; but since 1815 Switzerland and Austria have been vying with one another in constructing mountain roads. Recently, however, railroads have taken the place of the old highways, and now there are six principal railway routes connecting Italy with the rest of Europe.

The Corniche and Mont Cenis roads place France and Italy in direct communication; the former running for about 130 miles at the base of the Maritime Alps, along the Riviera from Nice to Genoa; the latter connecting Chambéry in Savoy with Turin through the Cottian Alps by a tunnel nine miles long, this road deriving greater importance from the fact that it is a part of the transcontinental route, London-Paris-Brindisi-Suez. The St. Gothard is the shortest route between Germany and Italy; running from Lake Zug (in Switzerland) to Lake Maggiore (in Italy), a distance of 120 miles; cutting through the Lepontine Alps by a tunnel ten miles long, it makes of Genoa a port for Central Europe, as well as a sub-port for the ports of the Levant and the Atlantic; its position, crossing so many important lines, gives it a special military value.

The routes of the Brenner and the Semmering passes constitute the direct lines between Austria and Italy; the former passing from Innsbruck over the Rhetian Alps in the Tyrol to Bozen, a distance of ninety miles; the latter establishing communication between Vienna and Trieste, crossing one of the barriers of the Alps between the basin of the Leitha and the valley of the Mürz. The Arlberg route, the sixth and last, runs for eighty-five miles from Zurich to Innsbruck, and has a special military importance because it furnishes rapid and direct communication with the northeast of France, the southwest of Germany and the ports of the Adriatic.

The extremities of these various lines, in France, in Germany, in Austria and in Italy, are carefully fortified. Thus, the great importance of these lines in case of a European war is fully appreciated by all the nations bordering the Alps, and their occupation and possession will determine in great measure the plan of campaign. It is doubtful if Switzerland, with the 450,000 men that she can put under arms, will be able to resist an advance across her territory, especially if any two of the great nations such as Germany and Austria should combine their forces, one moving over Zug, for example, and getting possession of the northern part of the St. Gothard line, the other moving on the Rhine over the Arlberg route. Switzerland would thus be surrounded by the Triple Alliance on three sides, and would be practically helpless.

IT BLAMES EARTHQUAKES.

Novel Defence of a Railroad Company to Suits for Damages to Farms.

YORK, Pa., Sept. 13.—The alleged earthquakes in parts of eastern Pennsylvania are likely to be made a matter of judicial inquiry. Near New Market, at the northern boundary of York county, and near New Cumberland, in Cumberland county, some of the smaller streams have changed their course since last winter, several wells have become dry, and other wells and springs yield far less water than ever before in their history.

Some of the property holders declare that this state of affairs has been brought about by blasting done by a railroad company last spring and summer, and they propose to bring suits for damages. Others take the view that the change in watercourses, wells and springs is due to the small uplift of that part of the State announced to the public last June.

It is announced that this will be the defence of the railroad company to the suits for damages, and that consequently experts in geology will be called to the witness stand by the defendants.

Since May last a large part of an orchard between three and four miles southwest of Harrisburg has dropped below the level of the surrounding country considerably more than a foot, though all the trees remain upright.

At Columbia it has been ascertained that the apex of the roundhouse of the Pennsylvania Railroad Company has veered over from its normal position about eighteen inches, and there is no way of accounting for the change except by seismic influence.